



European Patent
Office

PARTIAL EUROPEAN SEARCH REPORT

under Rule 46, paragraph 1 of the European Patent Convention

Application Number

EP 02 42 5435

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	GB 1 410 530 A (PROCESS PERIPHERALS LTD) 15 October 1975 (1975-10-15) * page 1, left-hand column, line 1 - page 3, left-hand column, line 9; figure 2 *	1	H03K9/06 G01R23/09
A	WO 98 54837 A (KONECNY CESTMIR) 3 December 1998 (1998-12-03) * the whole document *	1	
A	US 5 521 556 A (O'SHAUGHNESSY TIMOTHY G ET AL) 28 May 1996 (1996-05-28) * figure 6 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H03K G01R
LACK OF UNITY OF INVENTION			
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:			
see sheet B			
The present partial European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.			
Place of search		Date of completion of the search	Examiner
THE HAGUE		16 December 2002	Jepsen, J
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 02 42 5435

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-12-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 1410530	A	15-10-1975	NONE	
WO 9854837	A	03-12-1998	AU 7027998 A WO 9854837 A1	30-12-1998 03-12-1998
US 5521556	A	28-05-1996	NONE	



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-4

Frequency/signal converter

2. Claims: 5-10

Switching regulator

The first invention according to claim 1 relates to a specific frequency to signal converter.

The second invention according to claim 5 relates to a switching regulator using a general frequency converter.

Claims 1 and 5 do not have any common or equivalent features apart from the use of a general unspecified frequency converter. Such a general converter (in the form of a PLL converter) is admitted to be known on pages 1 and 2 of the application.

For the above reason there are no shared special technical features defining a technical relationship between the inventions as defined in Rule 30 EPC. Therefore the application lacks unity of invention as required by Article 82 EPC.